



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,980	04/13/2004	Jeffrey M. Greenberg	2004P06006US	5326

7590 12/23/2009  
Elsa Keller, Legal Administrator  
Siemens Corporation  
Intellectual Property Department  
170 Wood Avenue South  
Iselin, NJ 08830

EXAMINER
----------

WOODS, TERESA S

ART UNIT	PAPER NUMBER
----------	--------------

3686

MAIL DATE	DELIVERY MODE
-----------	---------------

12/23/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/823,980	<b>Applicant(s)</b> GREENBERG, JEFFREY M.	
	<b>Examiner</b> TERESA WOODS	<b>Art Unit</b> 3686	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 April 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 54-69 and 100-111 is/are pending in the application.
- 4a) Of the above claim(s) 1-53, 70-99 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 54-69 and 100-111 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/13/04</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of Claims***

1. This action is in reply to the application filed on 04/13/2004.
2. Claims 54-69, 100-111 are currently pending and have been examined.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 54-56, 58-64, 66-69 and 100-111 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Kelley (US 2003 /0154085 A1) in views of Brant (US 6,278,975 B1).

6. **Claim 54:**

Kelley, as shown, discloses the following limitations:

- (a)receiving a voiced command from a voice input device of an ultrasound imaging system to insert a textual phrase into a section of an ultrasound examination report (See at least Fig. 3, Fig. 6-10, ¶0067, ¶0068).
- (b) identifying a set of textual phrases associated with the section (See at least ¶0068). Here, the physician not dictating the entire body of text and containing the essential majority of the often repetitive language serves as set of textual phrases associated with the section.
- (d) inserting the textual phrase selected in (c) into the section (See at least ¶0068).

Kelley does not explicitly disclose processing voice commands. However, Brant discloses a similar system provided below:

- (c) converting the received voiced command into a textual phrase selected from the set of textual phrases identified in (b); and (See at least column 11, lines 35-46).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Kelley so as to have include the selected voice command features of Brant to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by

any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

**7. Claim 55 & 63:**

Kelley and Brant disclose the limitation mentioned above. Kelley and Brant do not disclose the following limitations. However, Kelley further discloses *further comprising receiving a voiced request to create an ultrasound examination report, the ultrasound examination report comprising a plurality of sections associated with a respective set of textual phrases* (See at least Fig. 7, ¶0068, ¶0079).

**8. Claim 56 & 64:**

Kelley and Brant disclose the limitation mentioned above. Kelley and Brant do not disclose the following limitations. However, Brant further discloses *further comprising automatically displaying a set of available voice commands associated with the section* (See at least Fig. 9, column 7, lines 16-32). Here, the list of commands serves as displaying a set of available voice commands. Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Kelley so as to have include the selected voice command features of Brant to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the

efficiency of the system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

9. **Claim 58 & 66:**

Kelley and Brant disclose the limitation mentioned above. Kelley and Brant do not disclose the following limitations. However, Kelley further discloses *wherein (a) comprises receiving a voiced command to insert a textual phrase into a section of an ultrasound examination report displayed on an ultrasound imaging system* (See at least Fig. 6, Fig. 8, Fig. 9, ¶0066). Here, the Bladder Ultrasound KBT serves as an inserted ultrasound examination report. Also, ultrasound reporting and displaying is taught.

10. **Claim 59 & 67:**

Kelley and Brant disclose the limitation mentioned above. Kelley and Brant do not disclose the following limitations. However, Kelley further discloses *wherein (a) comprises receiving a voiced command to insert a textual phrase into a section of an ultrasound examination report displayed on an ultrasound review station* (See at least ¶0041, ¶0054, ¶0068). In the first citation, the computer terminal serves as an ultrasound review station. In the second citation, the

protocol serves as an ultrasound examination report.

**11. Claim 60 & 68:**

Kelley and Brant disclose the limitation mentioned above. Kelley and Brant do not disclose the following limitations. However, Kelley further discloses:

- (e) receiving a voiced request to insert an image into a section of the ultrasound examination report (See at least Fig. 3, Fig. 6, Fig. 7, ¶0065-¶0067, ¶0079). In the first citation, the patient's sample Bladder Ultrasound KBT serves as the ultrasound examination report.
- (f) inserting the image into the ultrasound examination report in response to the voiced request received in (See at least Fig. 7, ¶0065-¶0067, ¶00790).

**12. Claim 61 & 69:**

Kelley and Brant disclose the limitation mentioned above. Kelley and Brant do not disclose the following limitations. However, Brant further discloses:

- (e) receiving a voiced request to edit a section of the ultrasound examination report (See at least column 8, lines 47-49, column 11, lines 23-29 & 60-65). In the first and third citations, ultrasound utilization is taught. In the second citation, a report is generated after a query command.
- (f) editing the section of the ultrasound examination report in response to the voiced request received in (See at least Fig. 7, Fig. 8, column 7, lines 16-32).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Kelley so as to have include the voice command managing of ultrasound reports of Brant to comprehensively

administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

13. **Claim 62:**

Kelley, as shown, discloses the following limitations:

- *(a) receiving a voiced command from a voice input device of an ultrasound review station to insert a textual phrase into a section of an ultrasound examination report (See at least Fig. 3, Fig. 6-10, ¶0067, ¶0068).*
- *(b) identifying a set of textual phrases associated with the section (See at least ¶0068).*
- *(c) converting the received voiced command into a textual phrase selected from the set of textual phrases identified in (See at least ¶0068).*

Kelley does not explicitly disclose processing voice commands. However,

Brant discloses a similar system provided below:

- *(d) inserting the textual phrase selected in (c) into the section (See at least Fig. 9, column 2, lines 38-57, column 11, lines 35-46).*

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Kelley so as to have include the selected voice command features of Brant to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by



any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

14. **Claim 100:**

Kelley, as shown, discloses the following limitations:

- *receiving a voice signal from a voice input device of an ultrasound imaging system* (See at least Fig. 3, Fig. 6-10, ¶0067, ¶0068).
- *with the ultrasound imaging system, inserting the text into an ultrasound examination report* (See at least Fig. 3, Fig. 6, Fig. 7, ¶0065-¶0067, ¶0079). In the first citation, the patient's sample Bladder Ultrasound KBT serves as the ultrasound examination report.

Kelley does not explicitly disclose processing voice commands. However,

Brant discloses a similar system provided below:

- *with the ultrasound imaging system, converting the voice signal into text* (See at least column 11, lines 35-46 and 60-65). Here, the ultrasound signal and processor serve as the ultrasound imaging system.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Kelley so as to have include the selected voice command features of Brant to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

**15. Claim 101:**

Kelley and Brant disclose the limitation mentioned above. Kelley and Brant do not disclose the following limitations. However, Brant further discloses *wherein (b) comprises converting the voice signal into text using a voice recognition unit of the ultrasound imaging system* (See at least ¶0054, ¶0119; Claim 24). In the first citation, the ultrasound procedure serves as the ultrasound imaging system. In the second citation, the input device having user specific voice recognition capability serves as a voice recognition unit.

**16. Claim 102 & 108:**

Kelley, as shown, discloses the following limitations:

- *a voice recognition unit coupled with the voice input device, the voice recognition unit being operative to convert a voice signal received from the voice input device into text* (See at least ¶0079). Here, the voice recognition engine serves as the voice recognition unit being operative to convert a voice signal received from the voice input device into text.

Kelley does not explicitly disclose a voice hardware device. However, Brant discloses a similar system provided below:

- *a voice input device* (See at least column 2, lines 26-29).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Kelley so as to have include the selected voice hardware device of Brant to comprehensively administer

ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

**17. Claim 103 & 109:**

Kelley and Brant disclose the limitation mentioned above. Kelley and Brant do not disclose the following limitations. However, Kelley further discloses *wherein the voice recognition unit is further operative to provide the text to an ultrasound examination report* (See at least ¶0004, ¶0054, ¶0068). In the second citation, the ultrasound procedure serves as an ultrasound examination report.

**18. Claim 104:**

Kelley and Brant disclose the limitation mentioned above. Kelley and Brant do not disclose the following limitations. However, Kelley further discloses *further comprising a processor coupled with the voice input device, wherein the voice recognition unit is implemented with the processor* (See at least ¶0012, ¶0119; Claim 24).

19. **Claim 105:**

Kelley and Brant disclose the limitation mentioned above. Kelley and Brant do not disclose the following limitations. However, Kelley further discloses *further comprising a processor coupled with the voice input device and the voice recognition unit* (See at least ¶0119; Claim 11).

20. **Claim 106:**

Kelley, as shown, discloses the following limitations:

- (a) *receiving a voice signal from a voice input device of an ultrasound review station* (See at least ¶0041, ¶0068). In the first citation, the computer terminal serves as an ultrasound review station.
- (c) *with the ultrasound review station, inserting the text into an ultrasound examination report* (See at least ¶0041, ¶0054) In the second citation, the ultrasound procedure serves as an ultrasound examination report.

Kelley does not explicitly disclose a work station. However, Brant discloses a similar system provided below:

- (b) *with the ultrasound review station, converting the voice signal into text* (See at least Fig. 1, column 11, lines 35-46 and 60-65).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Kelley so as to have include the ultrasound review station of Brant to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any

person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

21. **Claim 107:**

Kelley and Brant disclose the limitation mentioned above. Kelley and Brant do not disclose the following limitations. However, Kelley further discloses *wherein (b) comprises converting the voice signal into text using a voice recognition unit of the ultrasound review station* (See at least ¶0041, ¶0068). In the first citation, the computer terminal serves as an ultrasound review station.

22. **Claim 110:**

Kelley and Brant disclose the limitation mentioned above. Kelley and Brant do not disclose the following limitations. However, Kelley further discloses *further comprising a processor coupled with the voice input device, wherein the voice recognition unit is implemented with the processor* (See at least ¶0012, ¶0119; Claim 24).

**23. Claim 111:**

Kelley and Brant disclose the limitation mentioned above. Kelley and Brant do not disclose the following limitations. However, Kelley further discloses *further comprising a processor coupled with the voice input device and the voice recognition unit* (See at least ¶0119; Claim 11).

24. Claims 57 and 65 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Kelley (US 2003 /0154085 A1) in views of Brant (US 6,278,975 B1) further in view of Lamer (US 6,766,297 B1).

**25. Claim 57 & 65:**

Kelley and Brant disclose the limitation mentioned above. Kelley and Brant do not disclose the following limitations. However, Lamer further discloses:

- (e) receiving a voiced request for a display of a set of available voice commands associated with the section (See at least Fig. 2, column 4, lines 27-46). Here, the saved command words serve as a set of available voice commands associated with the section.
- (f) displaying the set of available voice commands associated with the section in response to the voiced request received in (See at least Fig. 2, Fig. 4, column 4, line 57 to column 5, line 7). Here, the displayed dictation window serves as displaying the set of available voice commands.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to have modified the system of Kelley and Brant so as to

have include the saved and displayable voice command features of Lamer to comprehensively administer ultrasound reporting to optimize the diagnosing capabilities to have improved the efficiency of the system, since so doing could be performed readily and easily by any person of ordinary skill in the art, with neither undue experimentation, nor risk of unexpected results.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry of a general nature or relating to the status of this application or concerning this communication or earlier communications from the Examiner should be directed to **Teresa Woods** whose telephone number is **571.270.5509**. The Examiner can normally be reached on Monday-Friday, 9:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, **Jerry O'Connor** can be reached at **571.272.6787**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Application: 10/823,980

Paper No. 20091204

Art Unit: 3686

Page 15

For more information about the PAIR system, see <http://portal.uspto.gov/external/portal/pair> .

Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866.217.9197** (toll-free).

/T. W./  
Examiner, Art Unit 3686  
12/10/09

/Gerald J. O'Connor/  
Supervisory Patent Examiner  
Group Art Unit 3686